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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,475

06/23/2006

Manabu Sutoh

71,051-036

1993

27305

7590

10/17/2008

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EXAMINER

CHANG, VICTOR S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

10/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/584,475

**Applicant(s)**

SUTOH ET AL.

**Examiner**

VICTOR S. CHANG

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-9, 12, 15, 16 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 12, 15, 16 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Introduction***

1. Applicants' amendments and remarks filed on 8/19/2008 have been entered. Claim 1 has been amended. Claims 1, 3-5, 12, 15, 16 and 19 are active.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. In response to the amendments, the grounds of rejection have been updated as set forth below. Rejections not maintained are withdrawn.

### ***Rejections Based on Prior Art***

4. Claims 1, 3-5, 12, 15, 16 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 571 649.

EP '649 relates to a dicing-die bonding film for producing semiconductor chips [abstract]. The bonding film comprises in sequence a substrate (base film), a pressure-sensitive layer (undercoat layer), a first adhesive layer, and a second adhesive layer [Figure; col. 3, ll. 12-16]. The second adhesive layer can be formed by semi-curing a thermosetting silicone resin to B-stage [col. 6, ll. 47-55]. A semiconductor wafer is placed on and bonded with the second adhesive layer of the film to fix the wafer. The resulting wafer is cut into chips by suitable means such as a rotary wheel cutter. The dicing-die bonding film has a sufficient holding power during cutting thereof into chips and the cut chips can be smoothly peeled along with the first and second adhesive layers due to the good release properties of the first adhesive layer to the

pressure-sensitive layer. The second adhesive layer side (outer surface) is temporarily covered with a separator (strippable layer) to protect the layer [col. 7, ll. 24-57].

For claims 1, EP '649 teaches that the cut chips can be smoothly peeled along with the first and second adhesive layers due to the good release properties of the first adhesive layer to the pressure-sensitive layer, EP '649 anticipates newly amended limitation "silicone based adhesive agent layer is stripped from said undercoat layer after bonding to said semiconductor wafer." It should be noted that the pressure sensitive layer reads on the undercoat layer of claimed invention, and absent a transition term of a closed clause, the claim language does not exclude the presence of the first adhesive layer of EP '649.

For claims 3-5, 12, 15, 16 and 19, absent any distinct feature between the layers, the pressure-sensitive layer of EP '649 reads on both layers of the laminated undercoat of the claimed invention. Since the film holds the chips cut from the semiconductor wafer, its base film has a surface area greater than the wafer. Finally, since the chip is bonded to the second adhesive layer, the strippable layer is necessarily removed prior to bonding.

EP '649 anticipates all the features of the claimed invention.

### ***Response to Arguments***

5. Applicants argue at Remarks page 7 that

"The stripping of the adhesive agent layer from the undercoat layer imparts structural features to the claimed dicing/bonding sheet and, in particular, to the adhesive agent layer, and such structural features cannot be ignored when comparing the instant claims to the teachings of the prior art. After all, an adhesive agent layer that is either not bonded to the semiconductor wafer or that cannot be stripped from the undercoat layer cannot satisfy each and every element of independent claim 1 as amended."

However, the pressure sensitive layer reads on the undercoat layer of claimed invention, and absent a transition term of a closed clause, the claim language does not exclude the presence of the first adhesive layer of EP '649. Further, absent any distinct feature between the layers, the pressure-sensitive layer of EP '649 reads on both layers of the laminated undercoat of the claimed invention.

### *Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTOR S. CHANG whose telephone number is (571)272-1474. The examiner can normally be reached on 7:00 am - 5:00 pm, Tuesday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Victor S Chang/

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Art Unit: 1794

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Primary Examiner, Art Unit 1794